**EKG Temesy-Armos**

* Atrial abnormality
  + LA enlargement
    - P wave in V1 –VERY NEGATIVE (= or >1mm2)
    - OR P = or > than 0.10s in frontal plane
  + RA enlargement
    - P wave amplitude = or > than 2.5 mm
* LV hypertrophy
  + ↑ leftward voltage (large R in left leads + or large S is right leads)
  + ST and T opposite to direction of QRS
  + Mean QRS vector may be shifted leftward but not necessarily since heart hypertrophies posterior rather than leftward
* RV hypertrophy
  + Right axis dev—greater than +90
  + Prominent R in R precordium R greater than or equal to S and or prominent S in left pericardium (S > or = to R)
  + ST and T opposite directions of QRS
* Ischemic cells cause ST displacement
  + ST elevation is an infart until proven otherwise
  + ST depression = ischemia
* Transmural infarction/ischemia
  + Damaged cells through the wall –ST goes UP!
* Subendothelium ischemia/infarction
  + Your wall cells (closest to the leads are normal)🡪 so ST goes DOWN not up!
* EKG w/ transmural Ischemia/infarction
  + Minutes—ST ↑
  + Hours ST still ↑
  + 2 weeks—T inverted
  + 6 months—T still inverted but coming up
  + >6 months—T now normal
* Localization of Infarct
  + Anterior –V1🡪V4
  + Inferior –II, II, AVF
  + Laterla, I, aVL, V5, V6
  + True Posterior—V1 (recipricol change)
* Causes of Widened QRS >0.12 sec
  + LBBB
    - Terminal QRS deflection is leftward and posterior (up in lead I and down in lead V1)
    - Usually associated w/ heart dz
  + RBBB
    - QRS= 0.11 is incomplete
    - QRS > 0.12 is complete
    - Terminal QRS deflection is rightward and anterior
      * Down in lead 1 and up in V1
    - Most commonly seen in absence of heart dz
  + Intraventricular conduction delay (consider hyperkalemia drugs)
  + LV hypertrophy
  + Electronically paced rhythm